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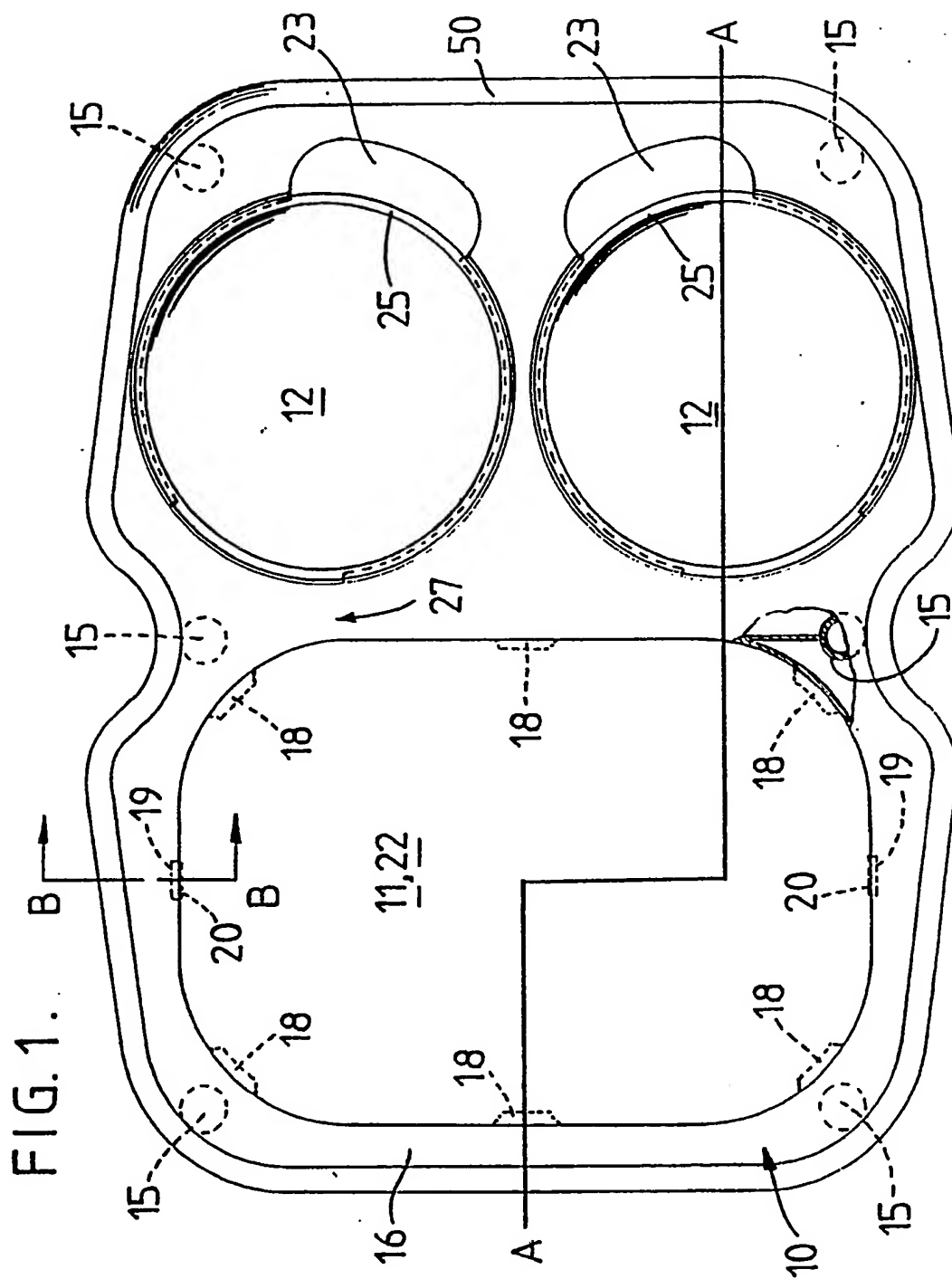


FIG. 2.

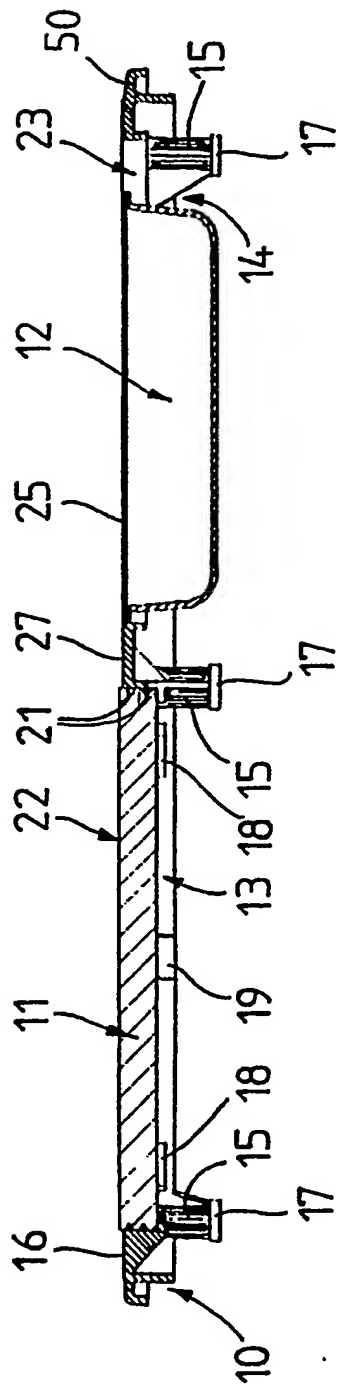


FIG. 3.

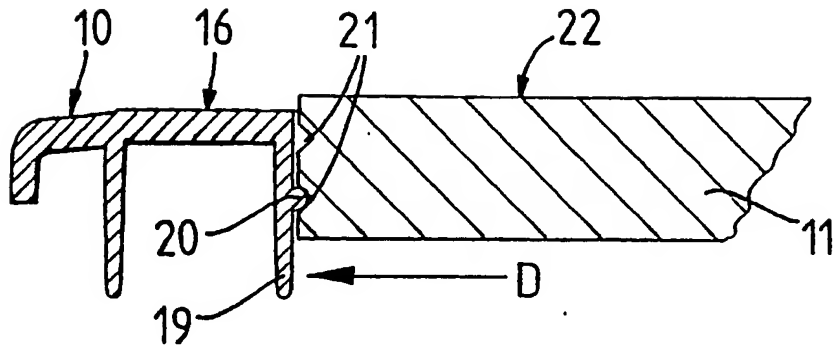


FIG. 4.

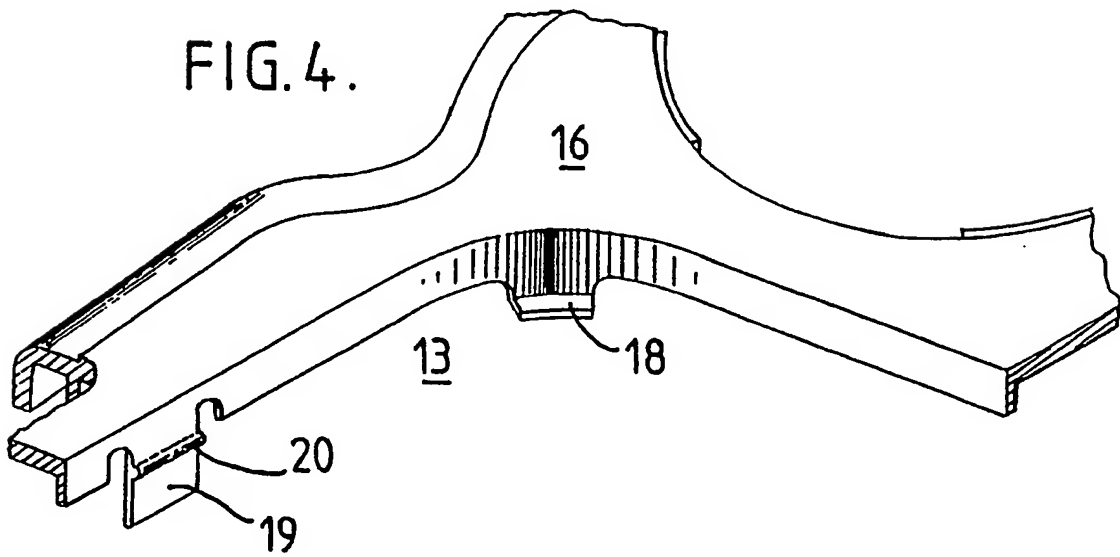


FIG. 5.

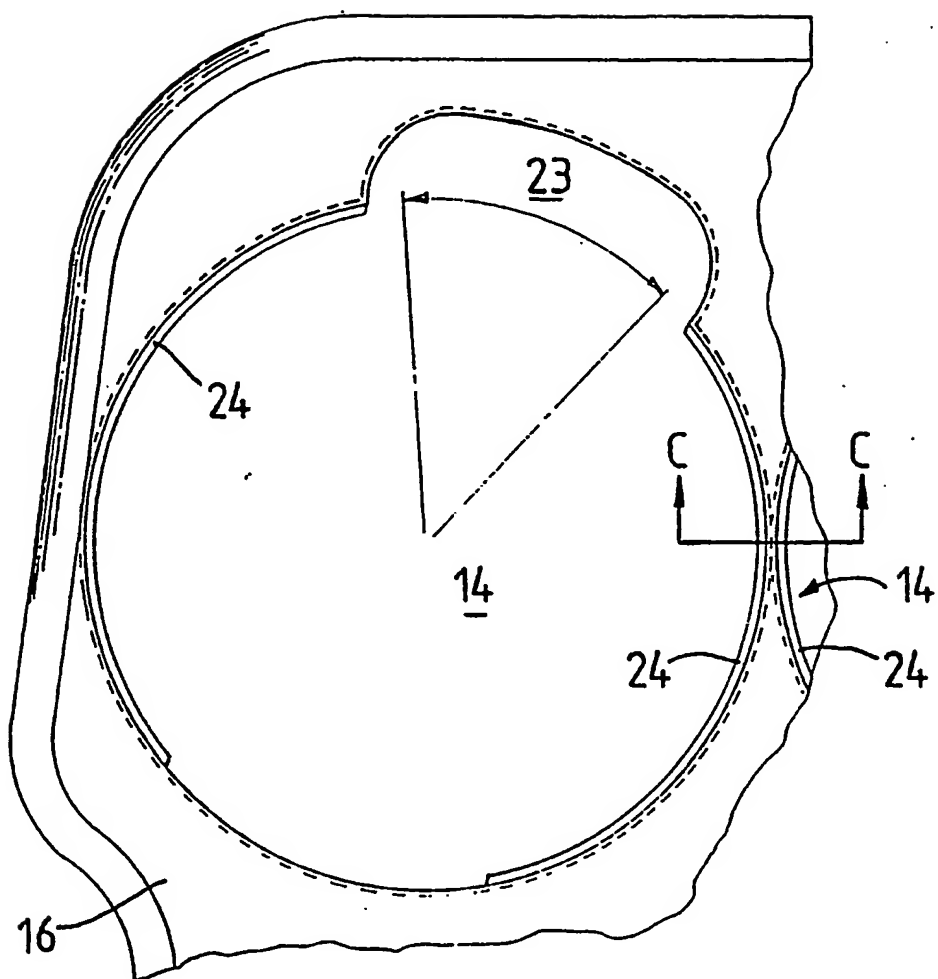


FIG. 6.

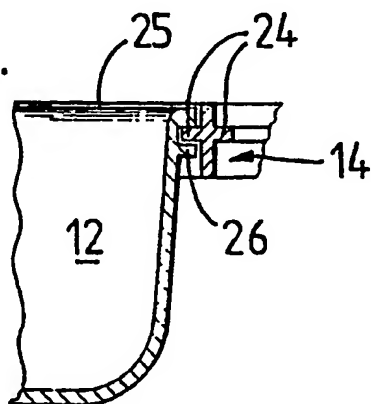


FIG. 7.

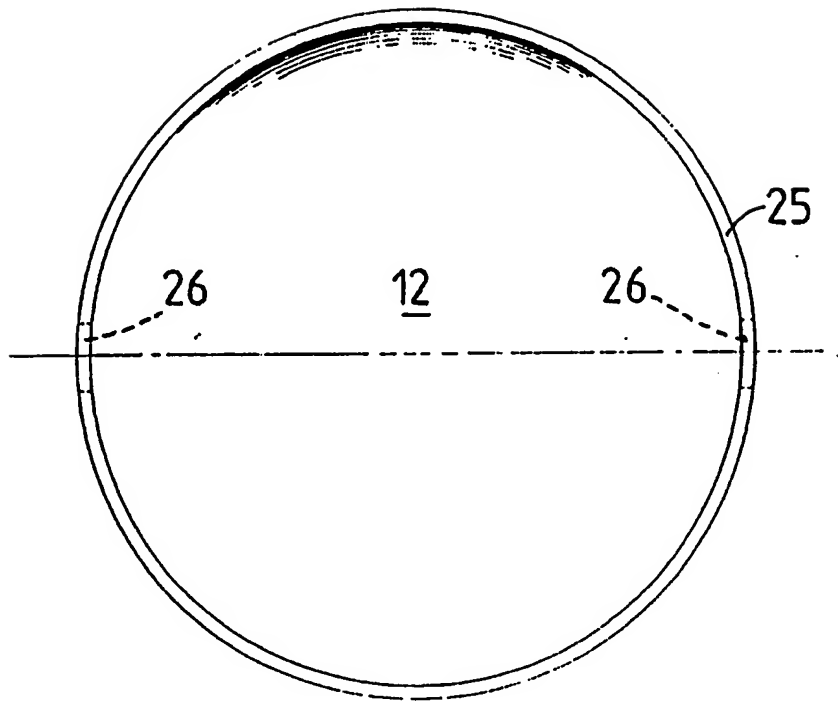
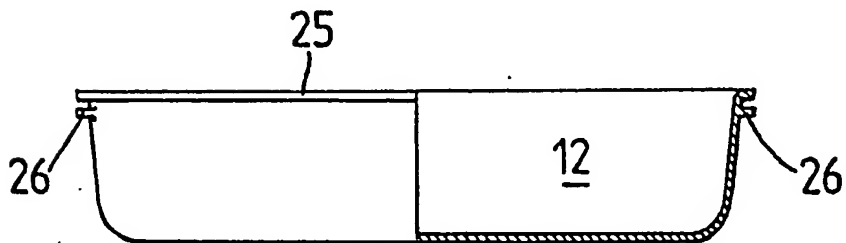


FIG. 8.



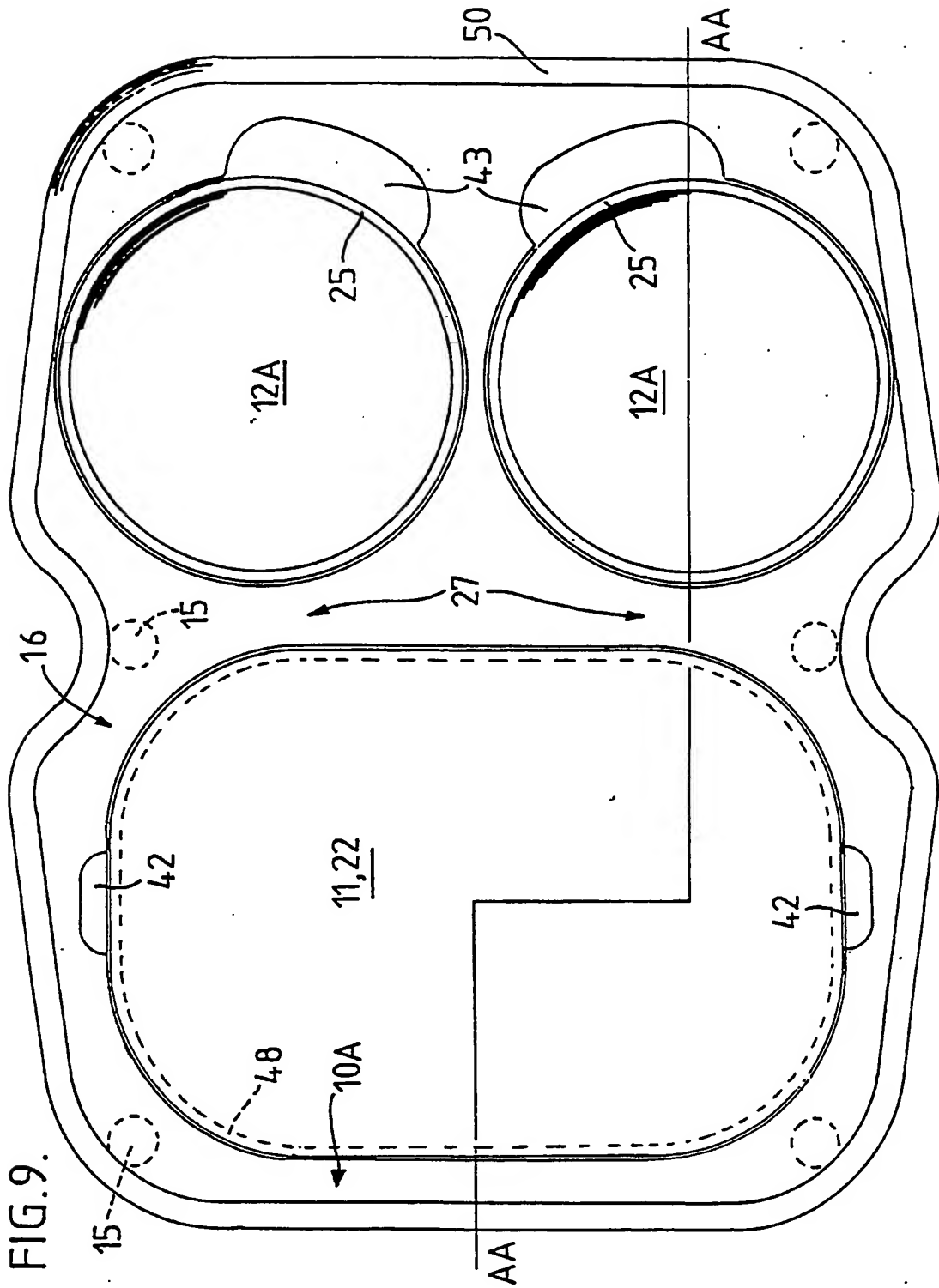


FIG. 11.

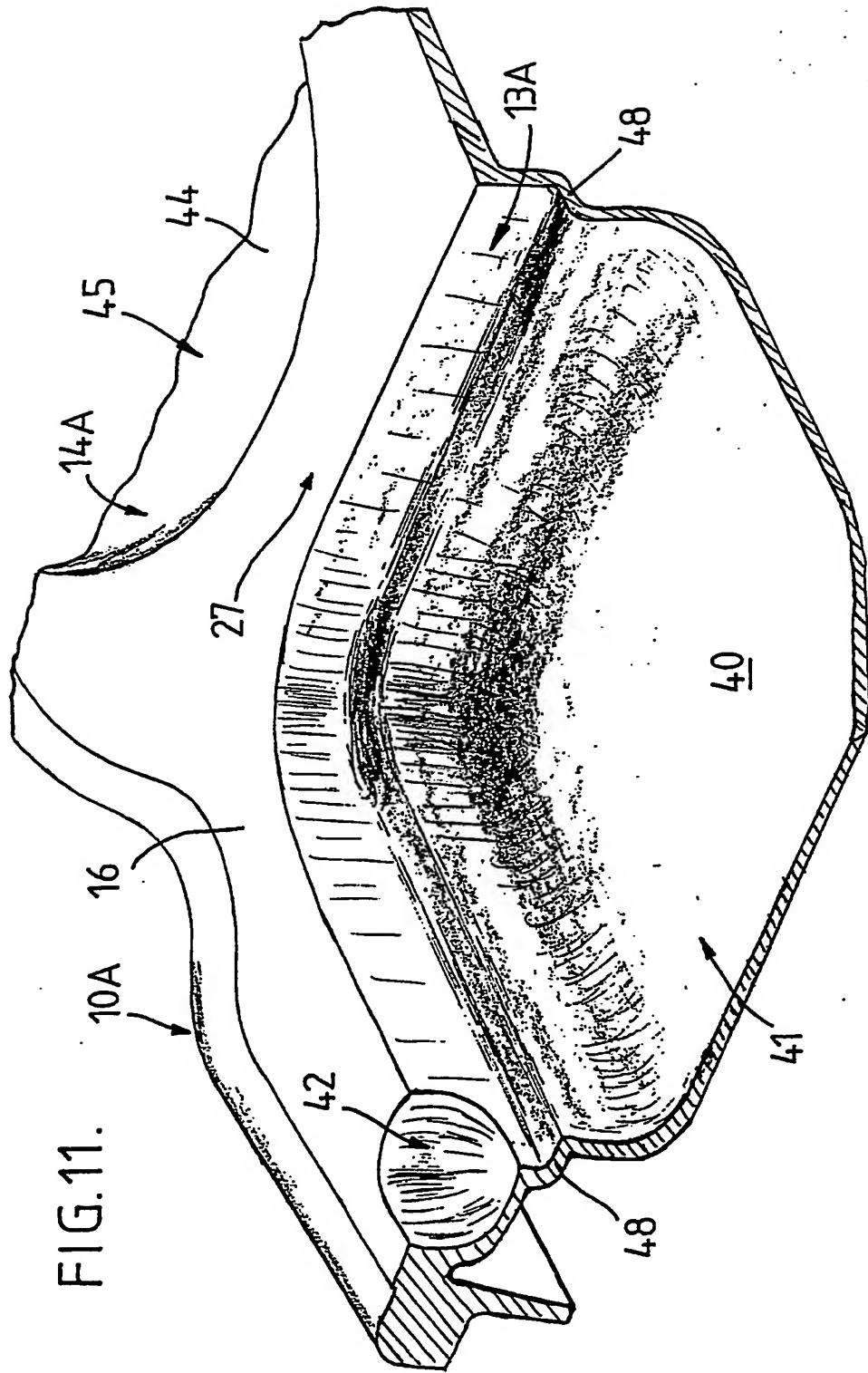


FIG.12.

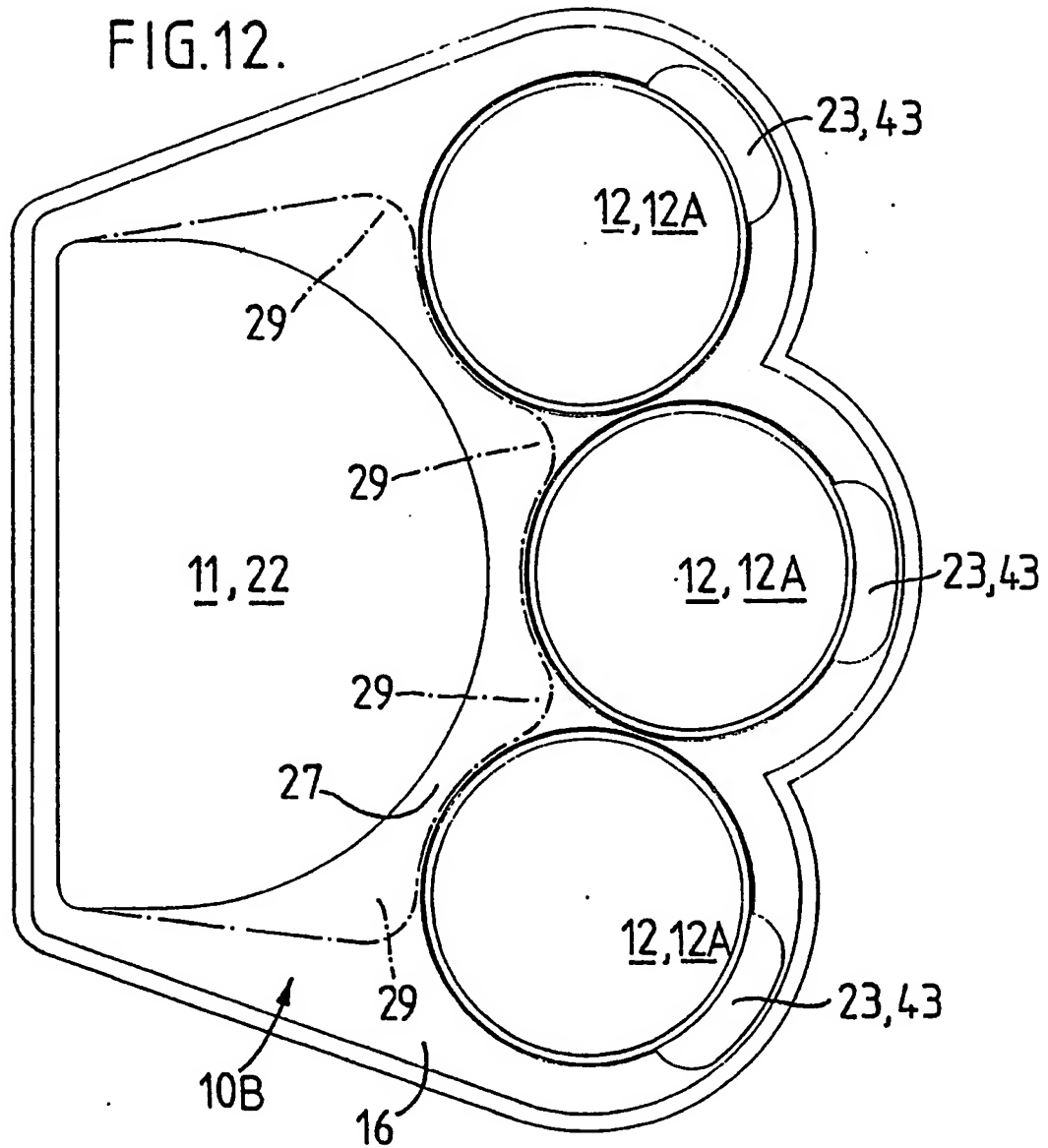


FIG. 13.

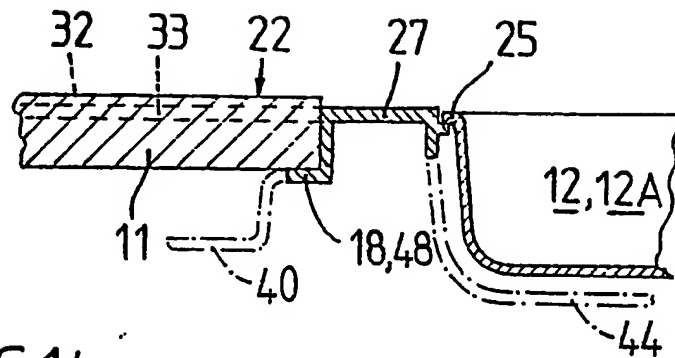


FIG. 14.

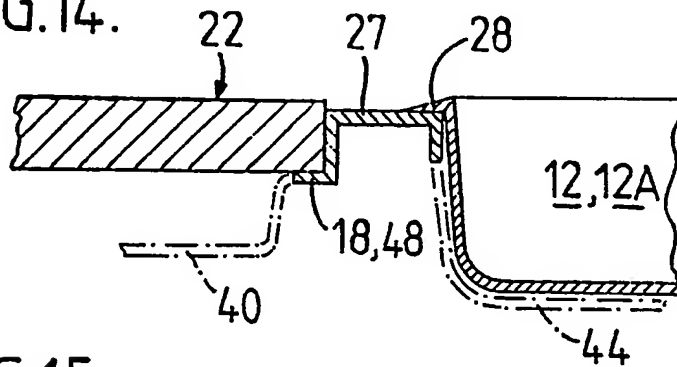


FIG. 15.

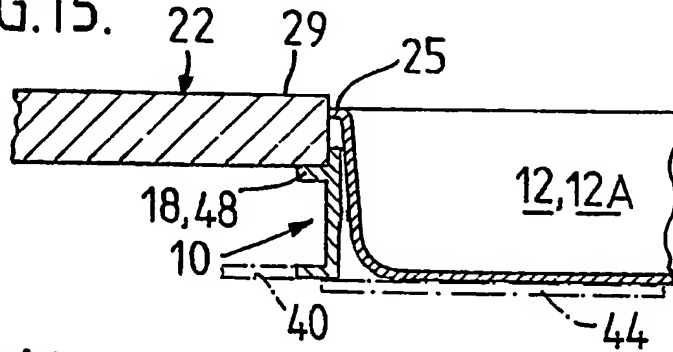
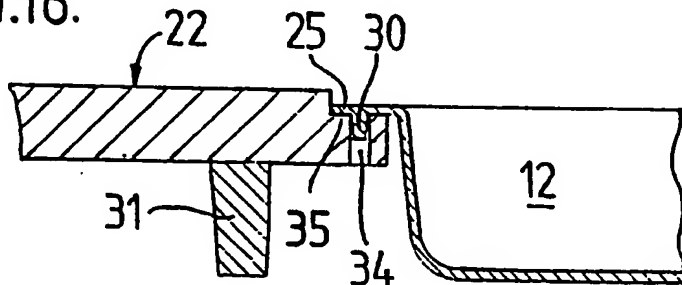


FIG. 16.



FOOD PREPARATION APPARATUS

This invention concerns food preparation apparatus.

5 It is known to cut and chop materials, such as ingredients for food, upon a board.

 However, the chopped or cut up ingredients have to be lifted from the board, and any waste material has to be
10 removed separately.

 To facilitate transfer of the ingredients and/or waste material to a receptacle, it is known to shape a board to provide a handle thereon so that the board can be
15 used as a carrier for conveying the material thereon to a receptacle.

 Several problems result from the inherent characteristics of chopping boards. For example, the mass
20 and thickness characteristics, necessary for durability and utility of the boards, make the boards cumbersome to manipulate.

 An object of the invention is to enable such problems
25 to be reduced or avoided.

 According to the present invention there is provided food preparation apparatus comprising a chopping or cutting board, and a receptacle, wherein the receptacle is

located alongside the chopping board by connecting means so that material can be swept from the board into the receptacle, and so that the receptacle can be removed manually from the apparatus.

5

The connecting means may comprise a magnetic coupling, and is preferably employed in conjunction with complimentary shaped formations on the board and receptacle to guide the receptacle into a predetermined position in which it is releasably held by the coupling.

10

The connecting means may comprise releasably interengaging formations on the board and receptacle to permit releasable location of the receptacle.

15

The connecting means preferably comprises a frame providing a socket for the receptacle.

The invention further provides food preparation apparatus comprising a chopping or cutting board and a receptacle, characterised in that the board is located on or integral with a frame which provides a socket in which the receptacle is releasably or removably located so that a brim part of the receptacle is below or generally close to the level of an upper surface of the board.

20

25

The brim part is preferably located slightly, e.g. less than 5mm, below said upper surface and closely

adjacent to an edge of said upper surface.

The board may be integral with the frame, supported or mounted on the frame or affixed to the frame. In a preferred embodiment, the frame provides a further socket for the board.

The socket for the board is preferably provided with board retaining means, which may comprises protuberances to engage in a groove or grooves provided in edges of the board, or the board could be retained alternatively by magnetic board retaining means, comprising magnets and ferromagnetic material on the board and frame. The board is preferably reversible, top to bottom, in the socket.

15

The apparatus is preferably provided with receptacle retaining means, which may comprise magnetic means, but preferably comprise formations in the receptacle socket and on the receptacle which can be brought into engagement by moving, e.g. partially turning, the receptacle in the socket.

The apparatus preferably provides access means, to facilitate removal of the receptacle and/or the board from the socket, such as apertures or recesses in the frame through which fingers can be inserted for gripping the receptacle or the board, or a handle on the receptacle or the board.

25

The receptacle socket and/or the board socket may be of dished or bowl form to serve as a further receptacle provided in the frame, so that the frame may alternatively be employed for carrying or displaying foodstuffs or other
5 matter.

The frame preferably provides a land between the board and the brim part, which land is preferably lower than the upper surface of the board. Alternatively, the
10 brim part may extend to the edge of the board.

The apparatus preferably includes a plurality of the receptacles locatable alongside the board by the connecting means, e.g. the socket or a respective one of a
15 plurality of the sockets.

The upper surface of the board preferably stands proud of the frame, e.g. at least 1mm up to 20mm, preferably about 2 or 3 to 10mm.

20

The frame preferably has feet, which may be of a shock absorbent and/or high friction material, and which may be formed as suckers.

25 The frame preferably provides an abutment for engaging a support, such as a hook, peg, pin or bracket, so that the frame can be hung on the support. The frame preferably has a peripheral flange, for locating on a brim

of a sink to support the apparatus over a suitably dimensioned sink.

The invention will be described further, by way of example, with reference to the accompanying diagrammatic drawings, wherein:-

- FIGURE 1 is a plan view of a first embodiment of apparatus of the invention,
- 10 FIGURE 2 shows a section on the line A-A in FIGURE 1,
FIGURE 3 shows a section on the line B-B in FIGURE 1,
FIGURE 4 is a perspective view of a detail of a frame of the apparatus,
- FIGURE 5 is an enlarged plan view of part of the apparatus
15 showing a receptacle,
FIGURE 6 shows a section on the line C-C in FIGURE 5,
FIGURE 7 is a plan view of a receptacle of the apparatus,
FIGURE 8 shows the receptacle in part sectional side elevation,
- 20 FIGURE 9 is a view similar to FIGURE 1 showing a second embodiment of the apparatus,
FIGURE 10 is a section on the line AA-AA in FIGURE 9,
FIGURE 11 is a perspective view of a detail of the frame of the second embodiment,
- 25 FIGURE 12 is a plan view of a third embodiment of apparatus of the invention, and
FIGURES 13 to 16 are sectional diagrams showing variations of interrelationships between the board and receptacle of

the apparatus.

Referring generally to the FIGURES, the apparatus primarily comprises a frame 10, 10A or 10B which serves as
5 connecting means for connecting together a board 11 and a plurality of receptacles 12 or 12A, of which there are two in the first and second embodiments and three in the third embodiment.

10 The frame 10, 10A or 10B is moulded from a durable plastics material such as high-impact polystyrene, ABS, impact modified PVC, polypropylene, polyethylene or polyurethane, (but could be cast or presses e.g. in a metal such as aluminium or machined from any suitable
15 material e.g. plastics metal or wood) so as to provide a board socket 13 or 13A and a plurality of sockets 14 or 14A for the receptacles, and feet 15 to raise an upper surface 16 of the frame to a suitable level. The feet have elastomeric resilient inserts 17.

20

The board 11 may be formed from or coated with any suitably durable material, such as plastics e.g. polyethylene, ceramics or glass, but is preferably formed from wood so that the grain of the wood extends from end
25 to end of the board.

Each receptacle 12 or 12A comprises a shallow circular bowl having a brim 25.

In the first embodiment, FIGURES 1 to 8, the board socket 13 is upwardly and downwardly open, and the frame incorporates a number of rigid flanges 18 which project at the bottom of the board socket 13 to serve as seats for supporting the board 11. The socket 13 is generally rectangular with rounded corners, and at each end of the socket the frame provides flexible lugs 19 on which protuberances 20 are formed to project into the socket and serve as retaining means for the board 11.

10

The retaining means includes a pair of grooves 21 let into each end of the board to receive the protuberances 20 as the board is pressed down into the socket. The board is reversible top to bottom. The grooves may continue around the edge of the board for decorative and other purposes. In use, the board may be thrust from the socket, but, preferably, the lugs 19 are thrust back in the direction of arrow D to disengage the protuberances from the grooves before the board is pushed or moved out of the socket.

20

The thickness of the board is such that its upper surface 22 lies slightly e.g. one to three millimetres, above the upper surface 16 of the frame.

25

Each receptacle socket 14 is formed in the frame to include access means comprising a finger aperture 23 in the frame, and retaining means comprising two

diametrically opposed arcuate flanges 24 which project into the socket. The ends of the flanges are separated at one side of the socket by the finger aperture, and on the other side of the socket by an arcuate distance equal to the arcuate extent of the finger aperture.

Below the brim 25, each bowl 12 has two arcuately short diametrically opposed outwardly projecting lugs 26. The arcuate length of each lug is about 20% to 25% of the arcuate length of the finger aperture. The spacing of the lugs below the brim is sufficient to admit the flanges 24 therebetween when the receptacle is turned in the socket from a clear position in which one lug extends in the finger aperture to a retained position in which both lugs underlie the flanges.

The second embodiment shown in FIGURES 9 to 11 differs from the first embodiment primarily in that the frame 10A is constructed for retaining solid and/or liquid substances which pass into the sockets, and for carrying such substances when any or all of the board and receptacles are removed; and in that the retaining means is omitted.

In the second embodiment, the board socket 13A is only upwardly open, and is disposed above a dished base 40 so as to form a further receptacle 41 which is integral with the frame, and access means comprising two shallow

recesses 42 lead into opposite ends of the socket 13A from the upper surface 16. Instead of the flanges 18, the socket 13A is stepped to provide a continuous ledge 48 on which the board 11 is seated. The periphery of the board
5 may be plain, in this embodiment.

Each of the receptacle sockets 14A is only upwardly open, and has a dished base 44 so as to serve as a further receptacle 45 integral with the frame. The access means
10 comprises an eccentric extension 43 of the further receptacle 45.

The receptacles 12A do not require lugs 26.

15 In both embodiments the frame 10 or 10A has a peripheral flange 50, for engaging a brim of a suitably dimensioned sink, and is about 40cm by 30cm in plan.

The third embodiment shown in FIGURE 12 may employ in
20 the frame 10B the same receptacles 12, downwardly open sockets and retaining means as in the frame 10 in the first embodiment, but the frame 10B preferably provides further receptacles 41 and 45 as in the second embodiment. The appropriate receptacles 12 or 12A are employed, but in
25 the third embodiment the board 11 is of part circular or semi-circular form and the socket 13 or 13A is appropriately contoured, in plan.

Referring to FIGURE 13, in all embodiments the frame provides a land 27 between the board socket 13 or 13A and each receptacle socket 14 or 14A, and in these embodiments the upper surface of the board is above the land whereas
5 the brim is below the land.

However, as shown in FIGURE 14, the brim may be above the level of the land and may have a ramp extension 28 to lift material as it is swept from the land to the
10 receptacle.

A land is not essential: it is equally advantageous to merge the sockets partially so that part of the brim of the or each receptacle abuts or is proximal to part of the
15 edge of the board as indicated in FIGURE 15. In such forms of the apparatus, the said part of the brim may be straight to abut a straight portion of the edge of the board, or the board may have curved extensions 29, as indicated in broken lines in FIGURE 12, having edge
20 portions which are arcuately complementary to said parts of the brims.

The connecting means may be of forms which do not include a frame, and may connect the board directly to the
25 or each receptacle, for example, as shown in FIGURE 16 in which example, the connecting means comprises at least one socket 34 in a stepped margin 35 of the board, to receive a downwardly extending locating lug 30 on the underside of

the flanged brim of the or each receptacle. Such a board is preferably provided with feet or legs 31 to raise the upper surface of the board to a suitable level.

5 The invention is not confined to details of the foregoing examples, and includes within its scope mechanical and functional equivalents of the parts and features described, and many modifications and variations thereof are embraced by the invention. For example, the
10 frame may have a main body which serves as the board, or may extend below a board in the form of a sheet 32 of suitable material bonded to the underlying frame part 33 as indicated in broken lines in FIGURE 13. The connecting means may be of any suitable form. For example, the lug
15 30 may be omitted and a permanent magnet or magnets inserted into the socket 34, and the brim may include an attached or embedded ferromagnetic body, e.g. a strip of steel, so as to be attracted magnetically to the stepped margin.

20

 The receptacles may be of any suitable material or materials, e.g. plastics, ceramics, glass or metal, and may include position indicating means e.g. a moulded in marker such as an arrow, or preferably an upstanding
25 handle or tongue which will indicate the position of the receptacle in the socket as well as serving as the or part of the access means.

CLAIMS

1. Food preparation apparatus comprising a chopping or cutting board, and a receptacle, wherein the receptacle is
5 located alongside the chopping board by connecting means so that material can be swept from the board into the receptacle, and so that the receptacle can be removed manually from the apparatus.
- 10 2. Apparatus as claimed in Claim 1 wherein the connecting means comprises a magnetic coupling.
3. Apparatus as claimed in Claim 2 having complimentary shaped formations on the board and receptacle to guide the
15 receptacle into a predetermined position in which it is releasably held by the coupling.
4. Apparatus as claimed in Claim 1 wherein the connecting means comprises releasably interengaging
20 formations on the board and receptacle to permit releasable location of the receptacle.
5. Apparatus as claimed in any one of Claims 1 to 4 wherein the connecting means locates a brim part of the
25 receptacle below or generally level with an upper surface of the board.
6. Apparatus as claimed in Claim 1 wherein the

connecting means comprises a frame providing a socket for the receptacle.

7. Apparatus as claimed in Claim 6 wherein the board is
5 integral with the frame, supported or mounted on the frame or affixed to the frame, so that an upper surface of the board is above an upper surface land of the frame, and wherein said upper surface land is generally level with a brim part of the receptacle.

10

8. Food preparation apparatus comprising a chopping or cutting board and a receptacle, characterised in that the board is located on or integral with a frame which provides a socket in which the receptacle is releasably or
15 removably located so that a brim part of the receptacle is below or generally close to the level of an upper surface of the board.

9. Apparatus as claimed in Claim 8 comprising access
20 means, to facilitate removal of the receptacle, such as apertures or recesses in the frame through which fingers can be inserted for gripping the receptacle.

10. Apparatus as claimed in Claim 8 or 9 provided with
25 receptacle retaining means.

11. Apparatus as claimed in Claim 10 wherein the receptacle retaining means is magnetic.

12. Apparatus as claimed in Claim 10 wherein the receptacle retaining means comprises formations in the receptacle socket and on the receptacle which can be brought into engagement by moving, e.g. partially turning,
5 the receptacle in the socket.

13. Apparatus as claimed in Claim 10, 11 or 12 wherein the socket is upwardly and downwardly open.

10 14. Apparatus as claimed in Claim 8, 9 or 10 wherein the socket is of dished form and serves as a fixed receptacle in the frame.

15 15. Apparatus as claimed in any preceding claim wherein the frame provides a further socket for the board.

16. Apparatus as claimed in Claim 15 wherein the socket for the board is provided with board retaining means.

20 17. Apparatus as claimed in Claim 16 wherein the board retaining means comprises protuberances to engage in a groove or grooves provided in edges of the board.

25 18. Apparatus as claimed in Claim 16 wherein the board retaining means is magnetic.

19. Apparatus as claimed in Claim 15 or 16 wherein the socket for the board is of dished form and serves as a

fixed receptacle in the frame.

20. Apparatus as claimed in any one of Claims 15 to 19
wherein access means to facilitate removal of the board is
5 provided in the frame.

21. Apparatus as claimed in Claim 20 wherein the access
means comprises an aperture or recess in the frame leading
to the socket for the board.

10

22. Apparatus as claimed in any one of Claims 8 to 21
wherein the brim part of the receptacle extends to an edge
of the board.

15 23. Apparatus as claimed in any one of Claims 8 to 21
wherein the frame provides a land between the board and
the brim part, which land is lower than the upper surface
of the board.

20 24. Apparatus as claimed in any one of Claims 5 to 23
wherein the upper surface of the board stands proud of the
frame.

25 25. Apparatus as claimed in Claim 24 wherein the frame
has feet, which may be of a shock absorbent and/or high
friction material, and which may be formed as suckers.

26. Apparatus as claimed in any one of Claims 5 to 25

wherein the frame has a peripheral flange.

27. Apparatus as claimed in any preceding claim wherein the board is reversible, top to bottom, in the socket.

5

28. Apparatus as claimed in any preceding claim wherein the apparatus includes a plurality of the receptacles locatable alongside the board by the connecting means.

10 29. Food preparation apparatus comprising any novel detail, item, part, configuration of parts or functional feature, or any novel combination thereof disclosed herein and/or in the accompanying drawings.

15 30. Apparatus substantially as hereinbefore described with reference to FIGURES 1 to 8, FIGURES 9 to 11, FIGURE 12, or any thereof as modified by any one of FIGURES 13 to 16.

20

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Patents Act 1977
Examiner's report to the Comptroller under
Section 17 (The Search Report)

- 17 -

Application number

GB 9302707.6

Relevant Technical fields

(i) UK CI (Edition L) A4C (CUS)

(ii) Int CI (Edition 5) A47J (47/00)

Search Examiner

J A MULLEN

Databases (see over)

(i) UK Patent Office

(ii) ONLINE DATABASE: WPI

Date of Search

5 MAY 1993

Documents considered relevant following a search in respect of claims 1-28, 30

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
X	GB 2047078 A (CROWHURST)	1-4, 8 at least
X	GB 2015363 A (MALLINSON)	1, 4, 8 at least
X	US 4907789 (TICE)	1 and 8 at least
X	FR 2460125 (CHAUVIN)	1 and 8 at least
X	DE 2804421 (FREGIN)	1 and 8 at least

Category	Identity of document and relevant passages	Relevant to claim(s)

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